ABSTRACT

According to the invention, an apparatus and method are disclosed for configurable system monitoring for dynamic optimization of program execution. According to one embodiment, an event monitoring apparatus for dynamic optimization

5   comprises an event monitor to capture profiles of events that occur in the processing of an application by a microprocessor; an interface to a software component; monitor control vectors to direct the operation of the event monitor; and a profile buffer. According to the embodiment, the events to be monitored are selected by the software component. Profiles of the selected events are captured and stored in the profile buffer.

10   The profiles are made available to a handler routine selected by the software component, which processes the profiles to identify regions of the application for optimization and invokes optimizers to optimize the identified regions.